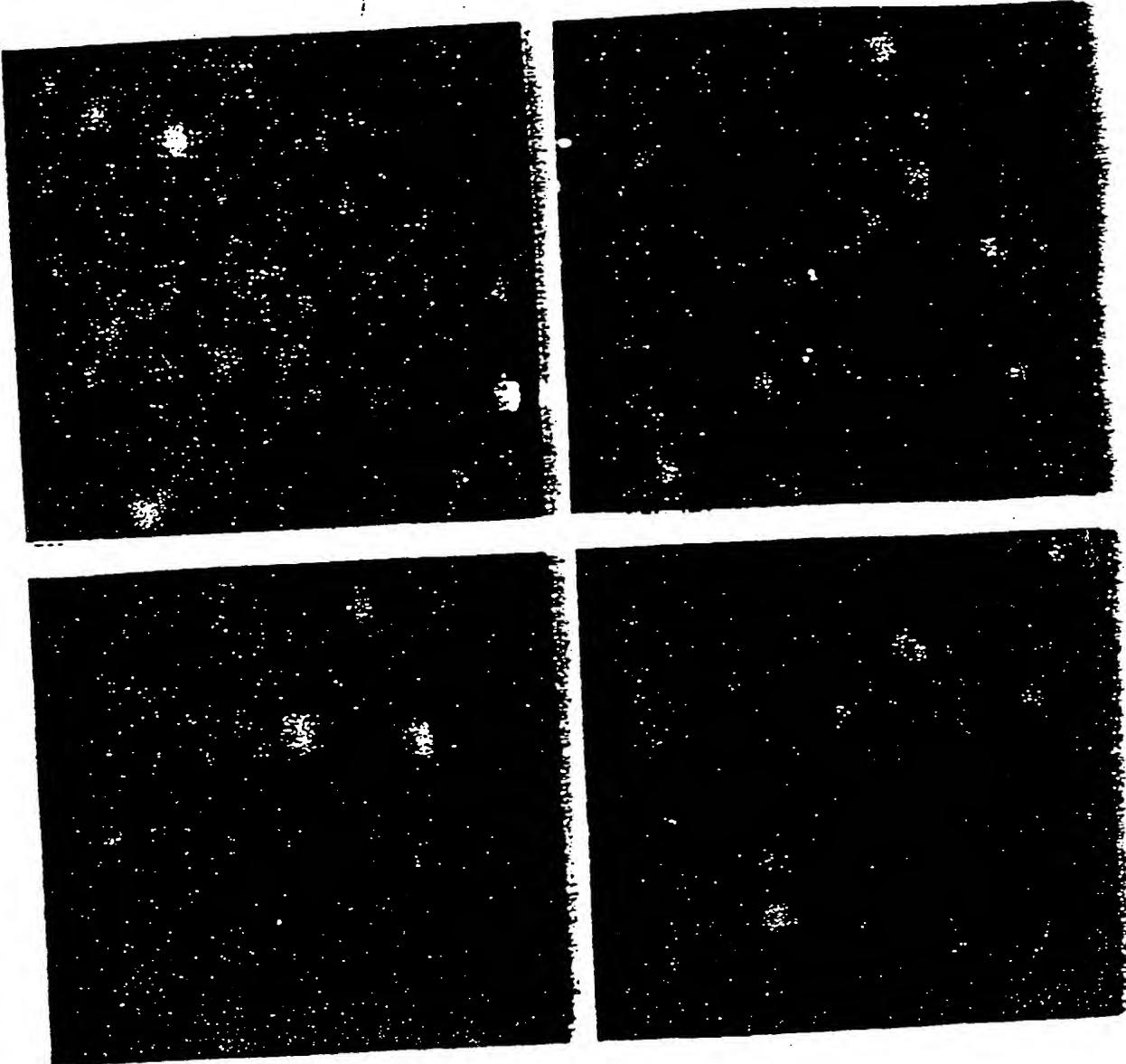


0562730 " 00001

Figure 1



106080 "09742660

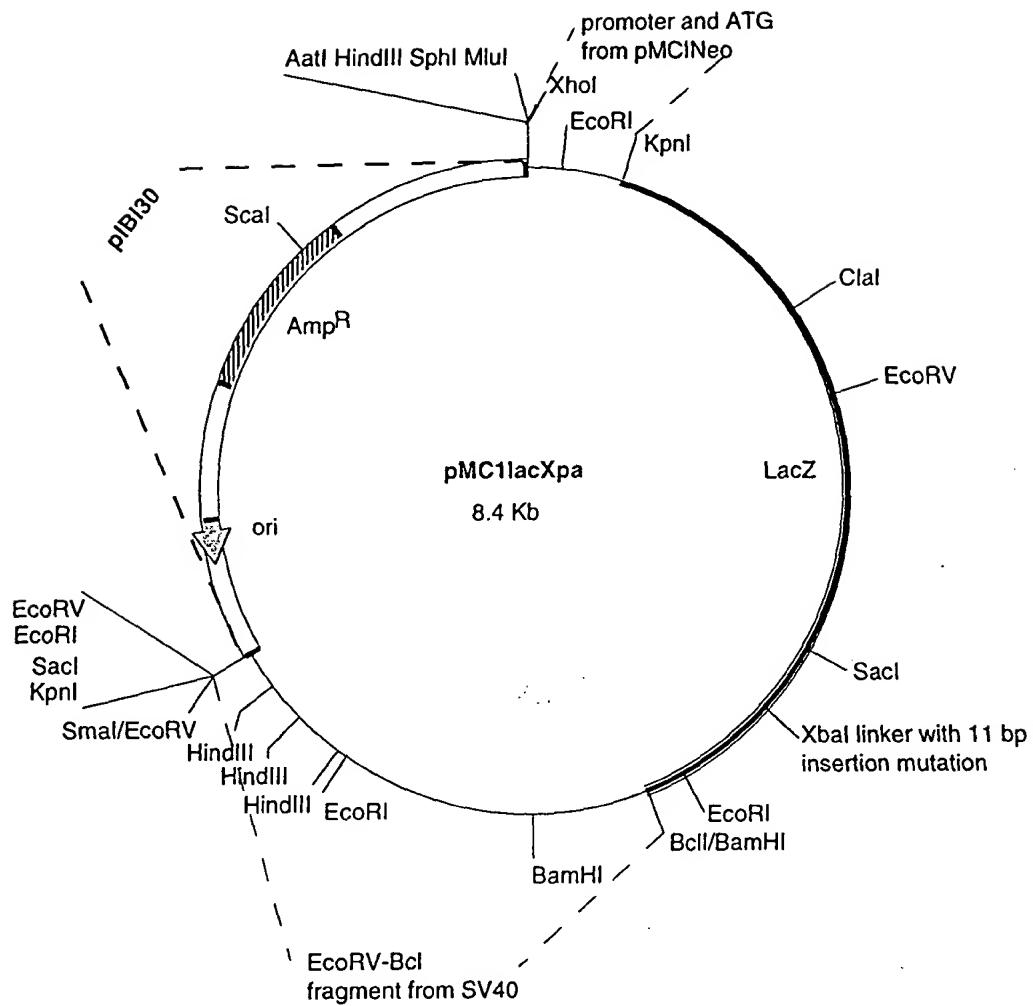


FIGURE 3

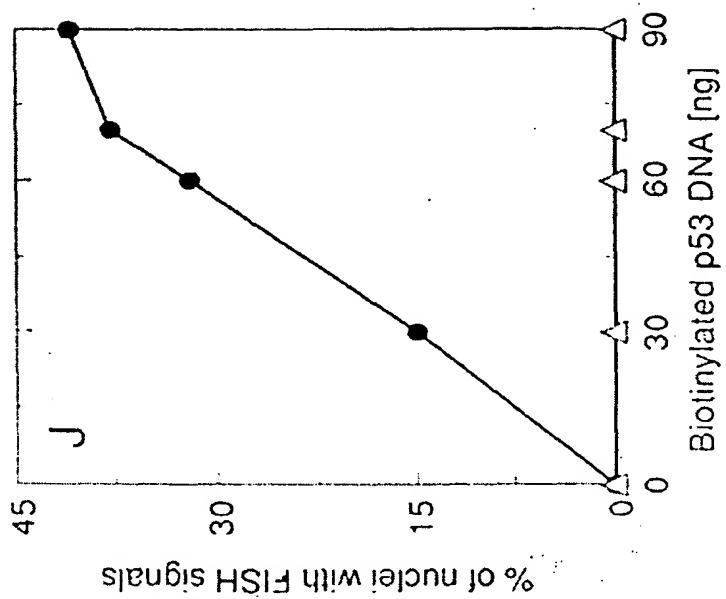
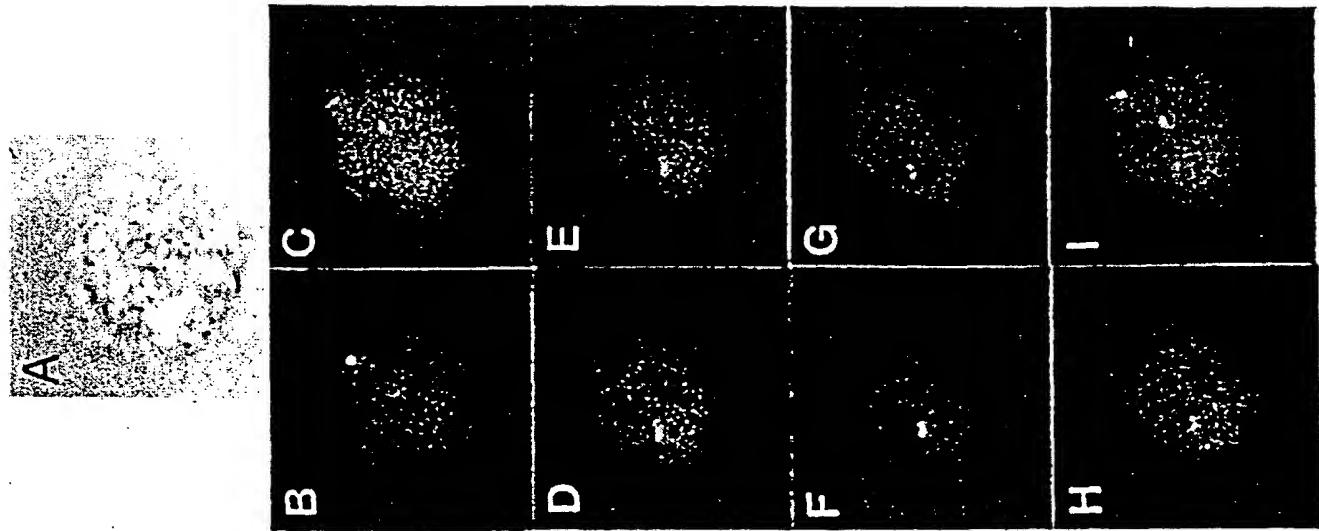


Figure 2

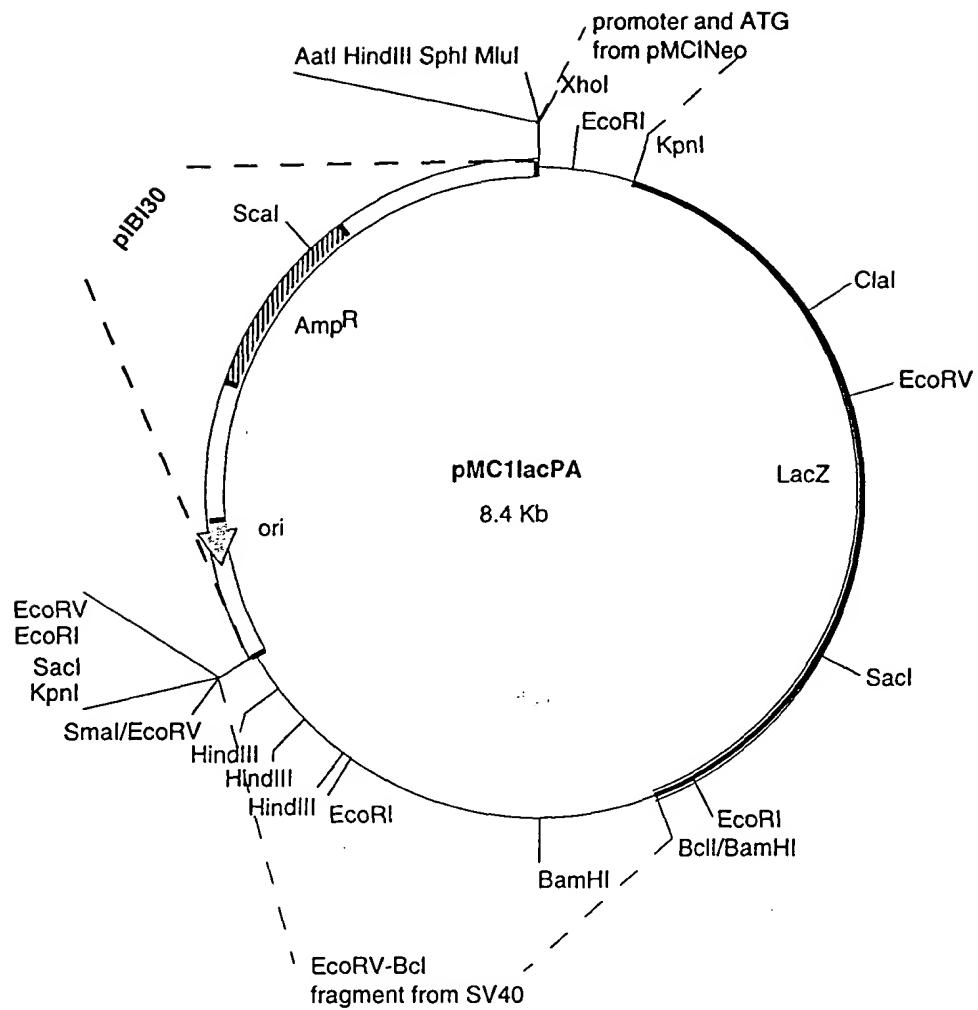


FIGURE 4

Figure 5

3610 3620 3630 3640 3650 3660
ATAAAAAAACAAC TGCTGACGCCGCTGCGCGATCAGTTACCCGTGCACCGCTGGATAACG

3670 3680 3690 3700 3710 3720
ACATTGGCGTAAGTGAAGCGACCCGCATTGACCCTAACGCCCTGGGTCGAACGCTGGAAAGG

PCR α

3730 3740 3750 3760 3770 3780
CGGCGGGGCCATTACCAAGGCCAAGCAGCGTTTGCAGTGCACGGCAGATACTTGCTG

3790 3800 3810 3820 3830 3840
ATGCGGTGCTGATTACGACCGCTCACCGTGGCAGCATCAGGGAAAACCTTATTTATCA

3850 3860 3870 3880 3890 3900
GCCGGAAAACCTACCGGATTGATGGTAGTGGTCAAATGGCGATTACCGTTGATGTTGAAG

3910 3920 3930 3940 3950 3960
TGGCGAGCGATAACCGCATCCGGCGCGGATTGGCCTGAACTGCCAGCTGGCGCAGGTAG

PCR β

3970 3980 3990 4000 4010 4020
CAGAGCGGGTAAACTGGCTGGATTAGGGCCGCAAGAAAATATCCCACCGCCTTACTG

F00000 - D00000

**TEST FOR ALTERATION OF AN INSERTION MUTATION IN THE lacZ
(β -GALACTOSIDASE) GENE OF EUKARYOTIC EXPRESSION VECTOR**

Experimental Sample	Injected Plasmid, 276-mer DNA and RecA Protein		Number of Injected Surviving Cells	Number of Surviving Cells Scoring Blue	Surviving Cells Scoring Blue (%)
1	pSV- β -gal	-276-mer - RecA	168	21	12.5
2	pMC1lacpa	- 276-mer - RecA	98	9	9.2
3	pMC1lacXpa	- 276-mer - RecA	173	0	0
4	pMC1lacXpa	+ 276-mer - RecA	103	0	0
5	pMC1lacXpa	+ 276-mer + RecA	168	6	3.6

Figure 6

TOP SECRET - DECODED

FIGURE 7A

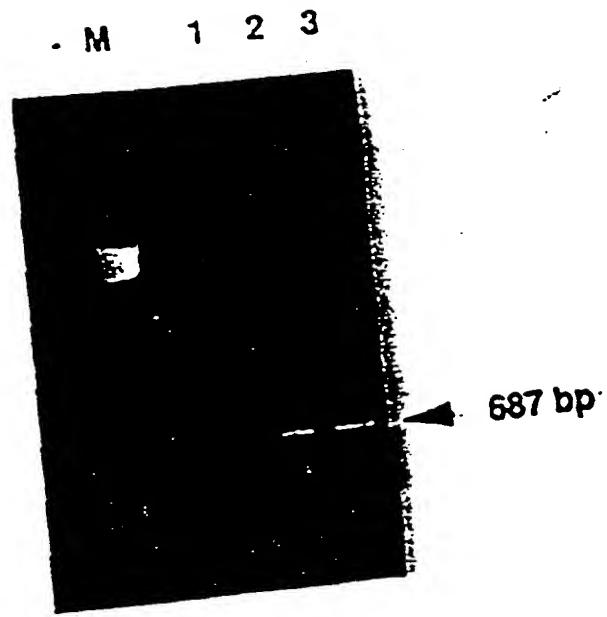
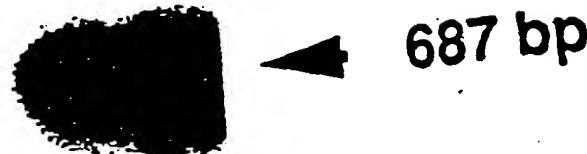


Figure
7A

Control (Σ CF)
 $T\Sigma$ CF Microinjected
 $T\Sigma$ CF P.L

Figure
7B



687 bp

09927160 - 080904

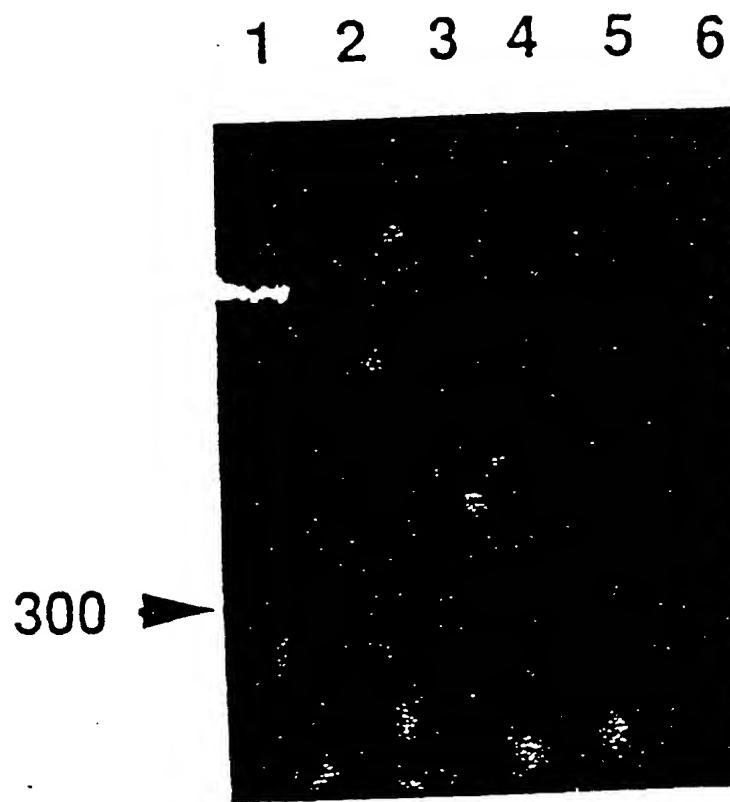


Figure
81A

1 2 3 4 5



Figure
81B

TOP SECRET C26560

299 ➤

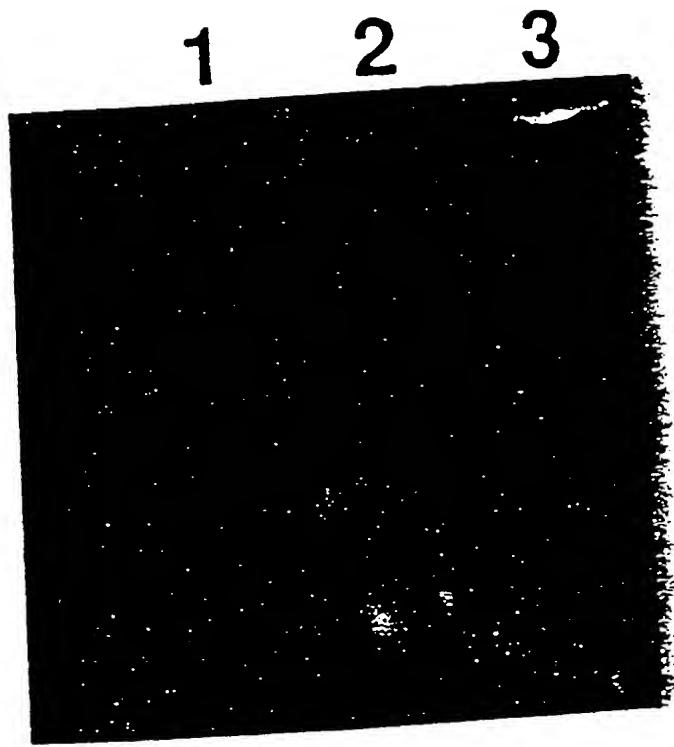


Figure
9

Scheme for recombination assay

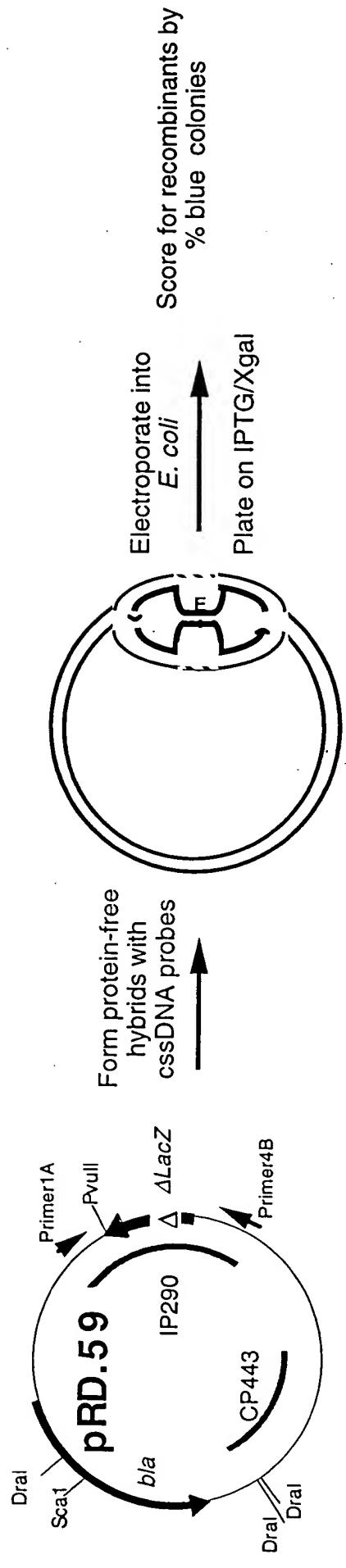


Figure 10

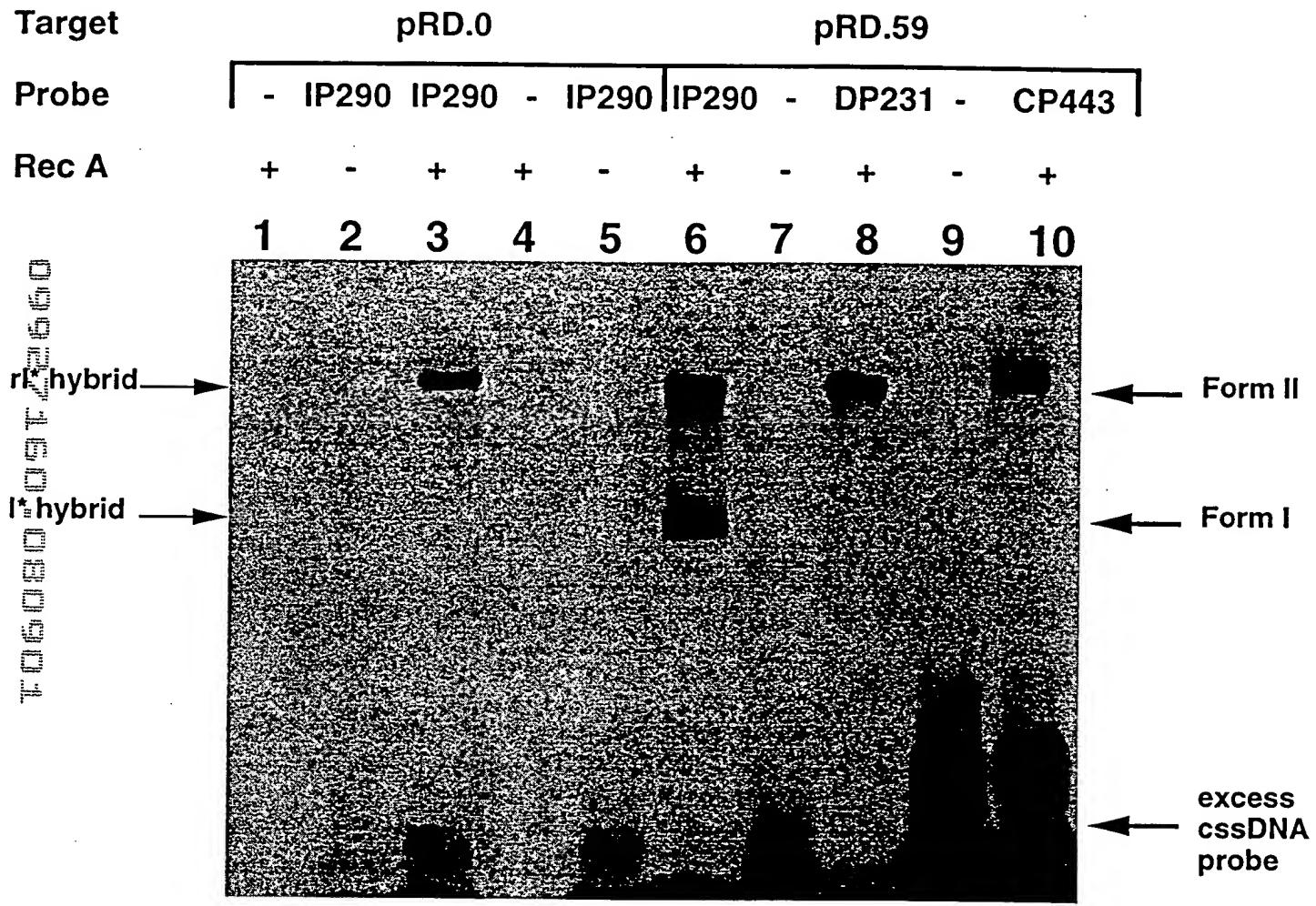


FIGURE 11

cssDNA Probe: Target Hybrids Enhance Homologous Recombination

Target	Probe	RecA coating	Host	%Recombinant / total colonies
pRD.59	-	+	RecA+ RecA-	0 0
	-	+	RecA+ RecA-	0 0
pRD.59	IP290	-	RecA+ RecA-	0 0
	IP290	-	RecA+ RecA-	3 0
pRD.59	IP290	+	RecA+ RecA-	0 0
	IP290	+	RecA+ RecA-	0 0
pRD.59	DP290	-	RecA+ RecA-	0 0
	DP290	-	RecA+ RecA-	0 0
pRD.59	DP290	+	RecA+ RecA-	0 0
	DP290	+	RecA+ RecA-	0 0
pRD.59	CP443	-	RecA+ RecA-	0 0
	CP443	-	RecA+ RecA-	0 0
pRD.59	CP443	+	RecA+ RecA-	0 0
	CP443	+	RecA+ RecA-	0 0

Figure 12

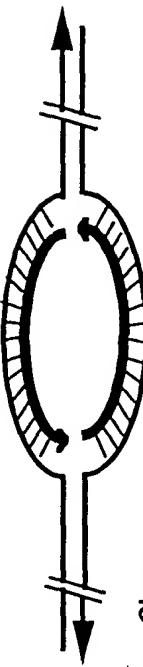
T G G C G S G T T C G T C G G G C
Stable

Unstable

Four-strand hybrids

All DNA probe and target strands are paired

A. Target DNA completely homologous



No Internal Homology Clamp

B. Target DNA with a deletion



Internal Homology Clamp
formed by cssDNA probe

C. Target DNA with an insertion



Internal Homology Clamp
formed by dsDNA target

Three-strand hybrids

Certain regions of DNA probe or target strands are unpaired

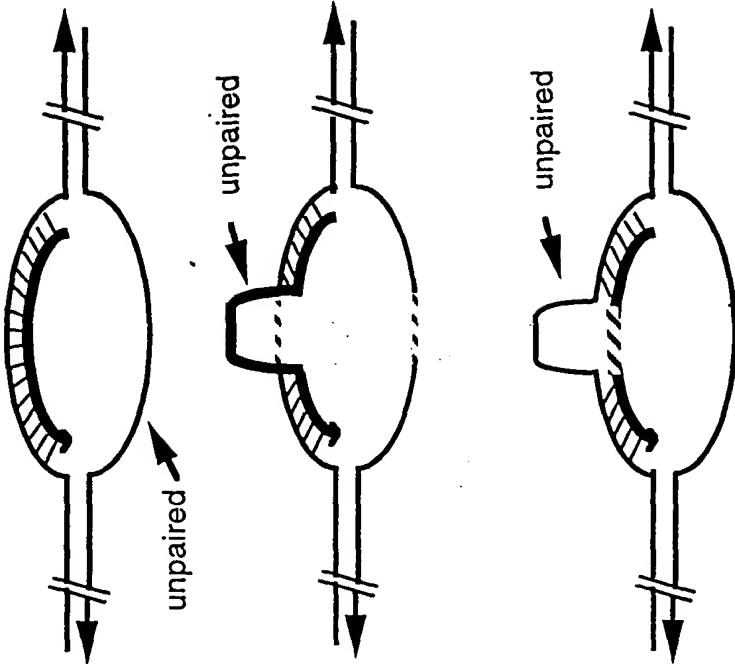


Figure 13

Figure 14A

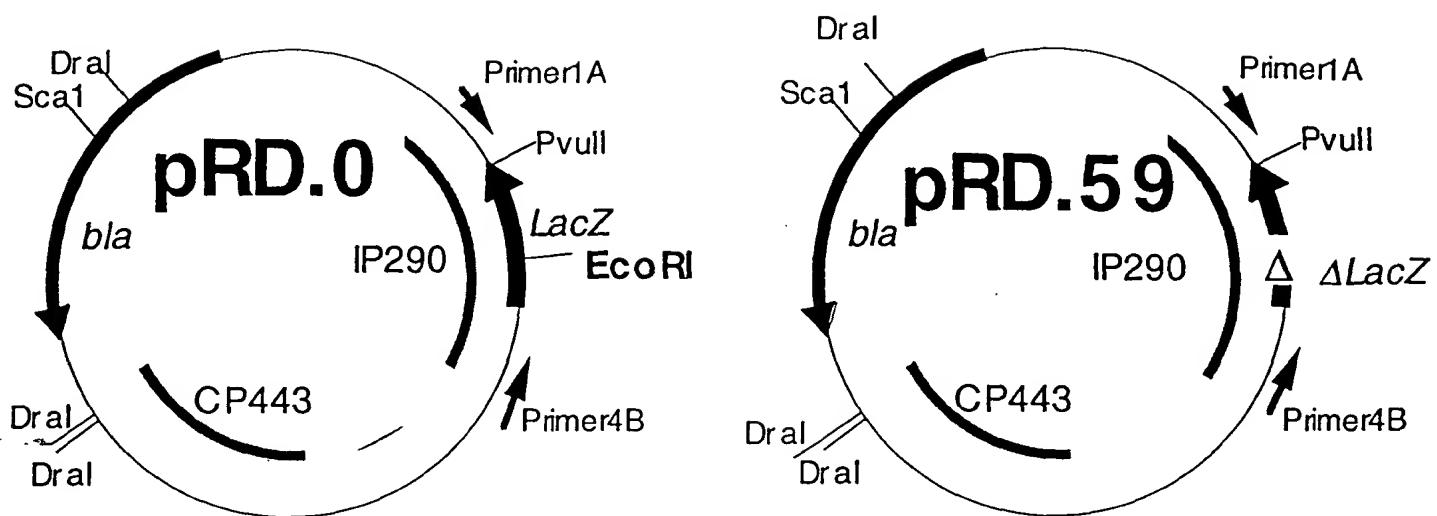
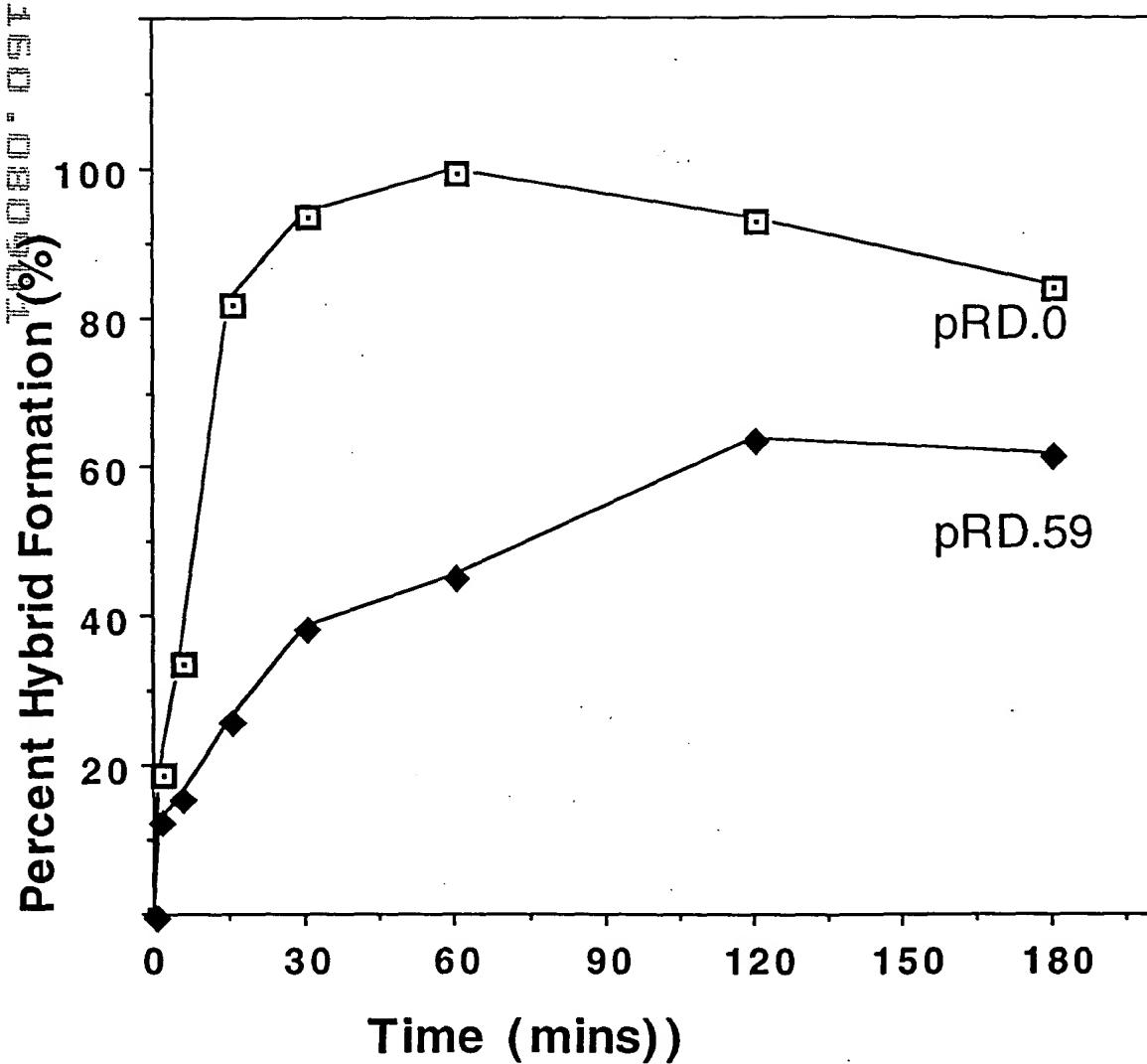


Figure 14B



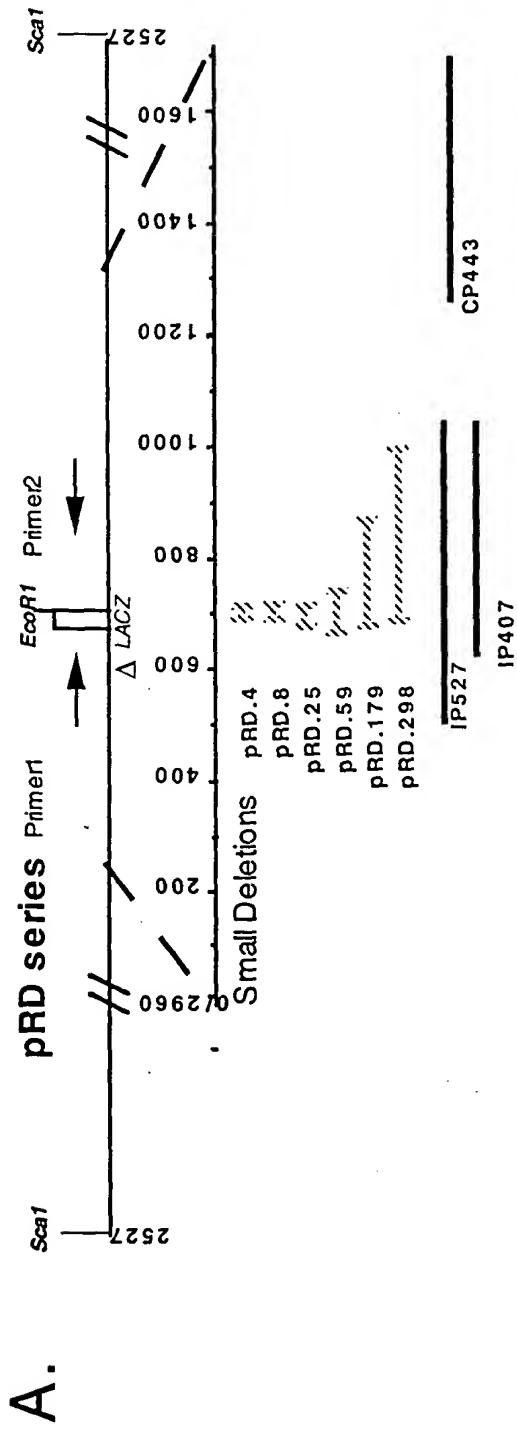


Figure 15A

Figure 15B

Target Deletion Size(bp)

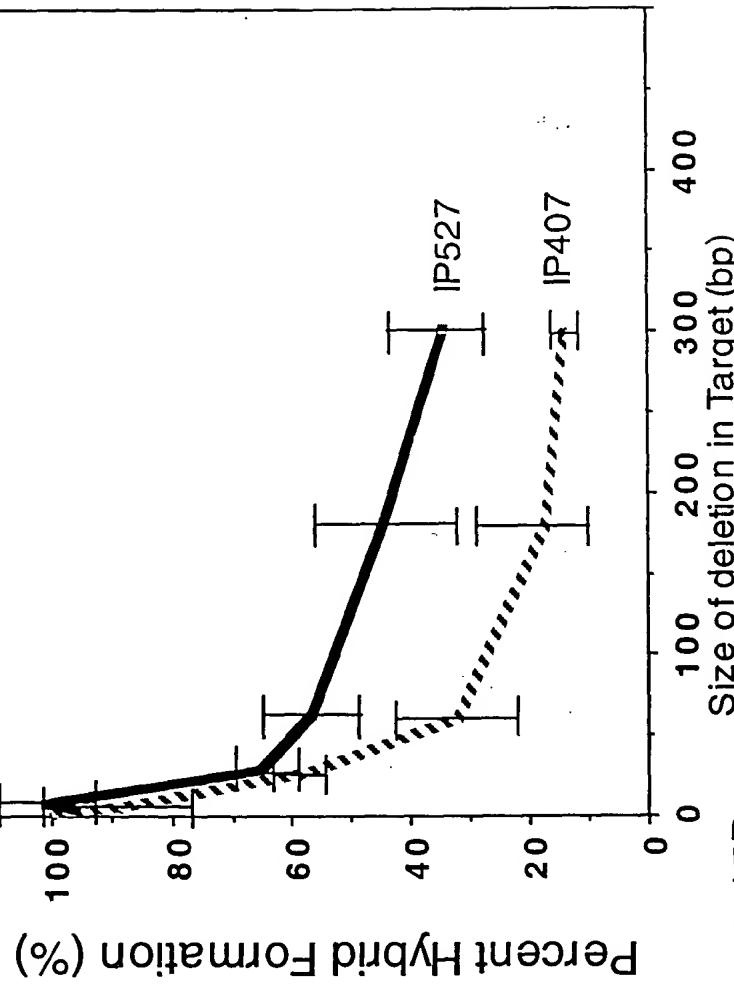
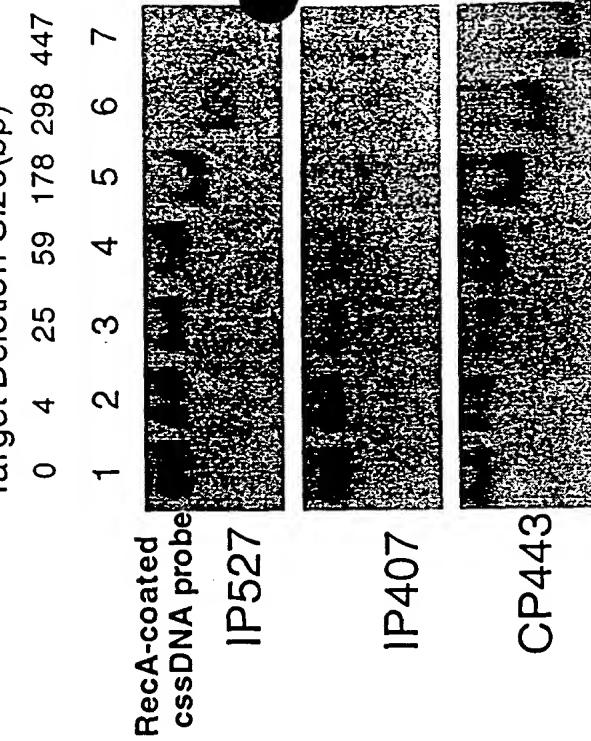
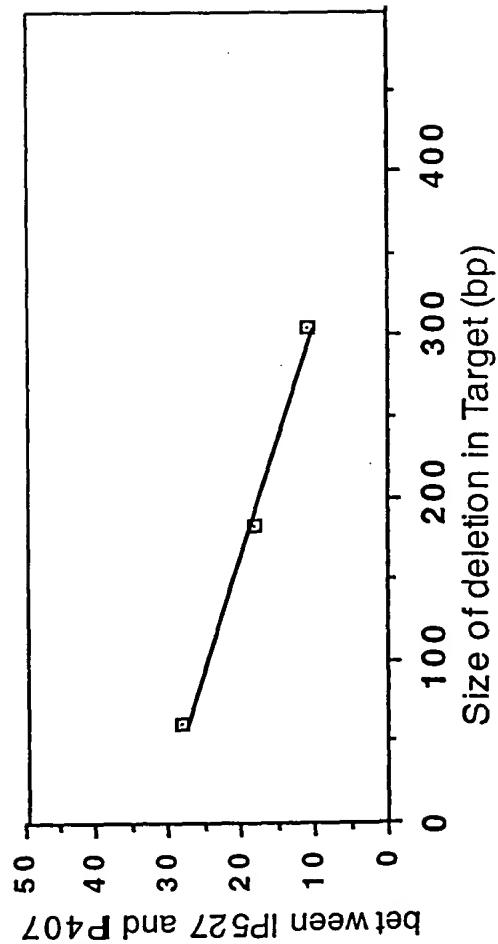


Figure 15D



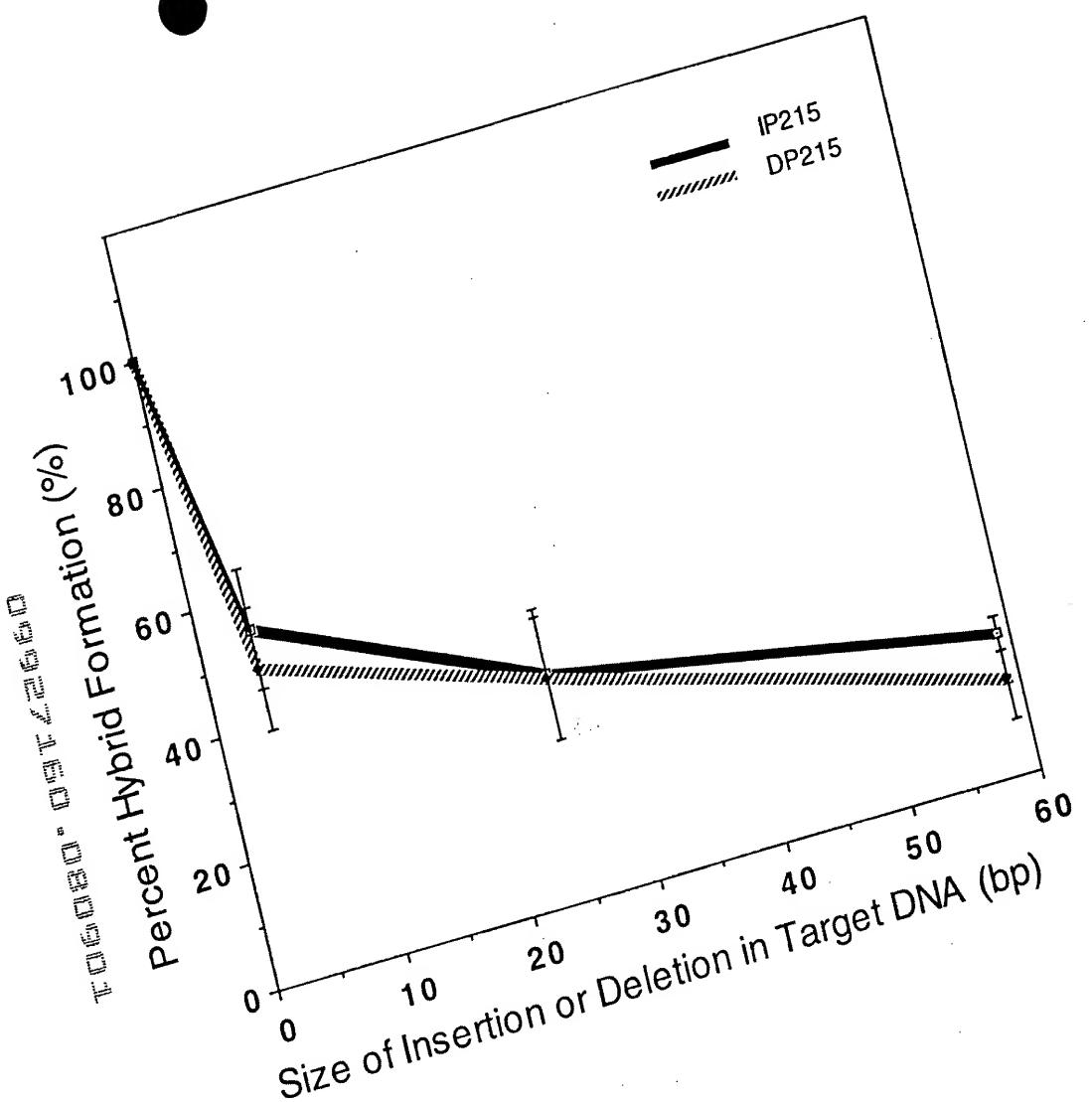


Figure 16

Figure 17A
26.6.0

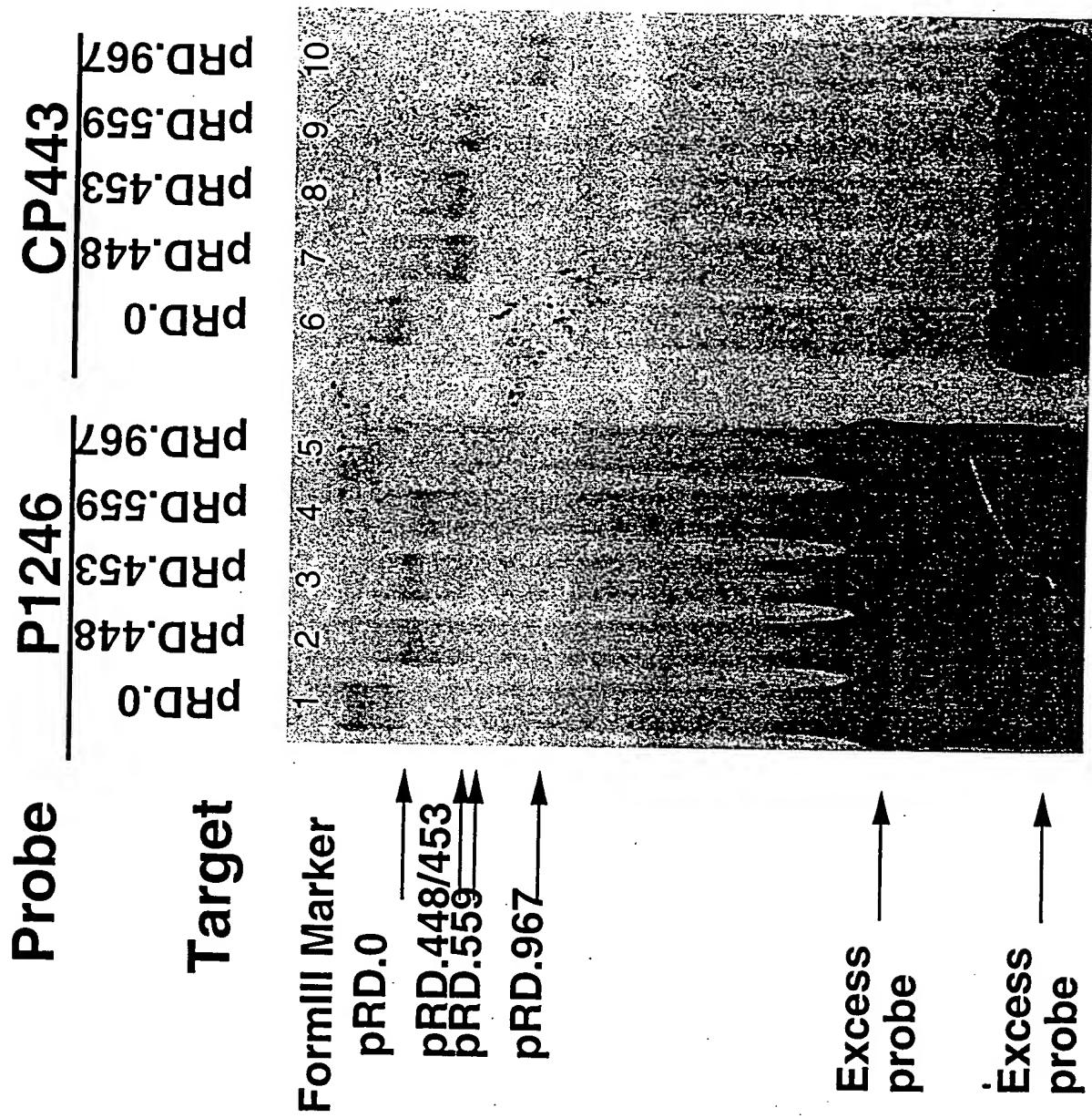


Figure 17B



pRD.0 1246
pRD.448 798
pRD.453 793
pRD.559 687
pRD.967 279

Figure 17C

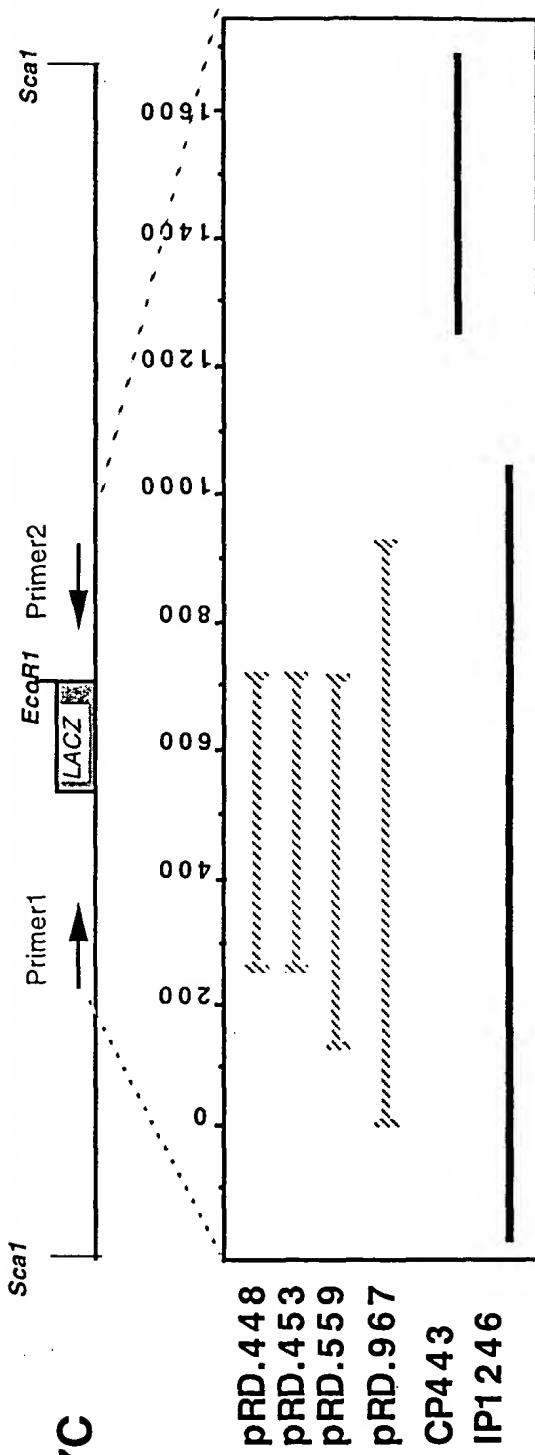


Figure 18

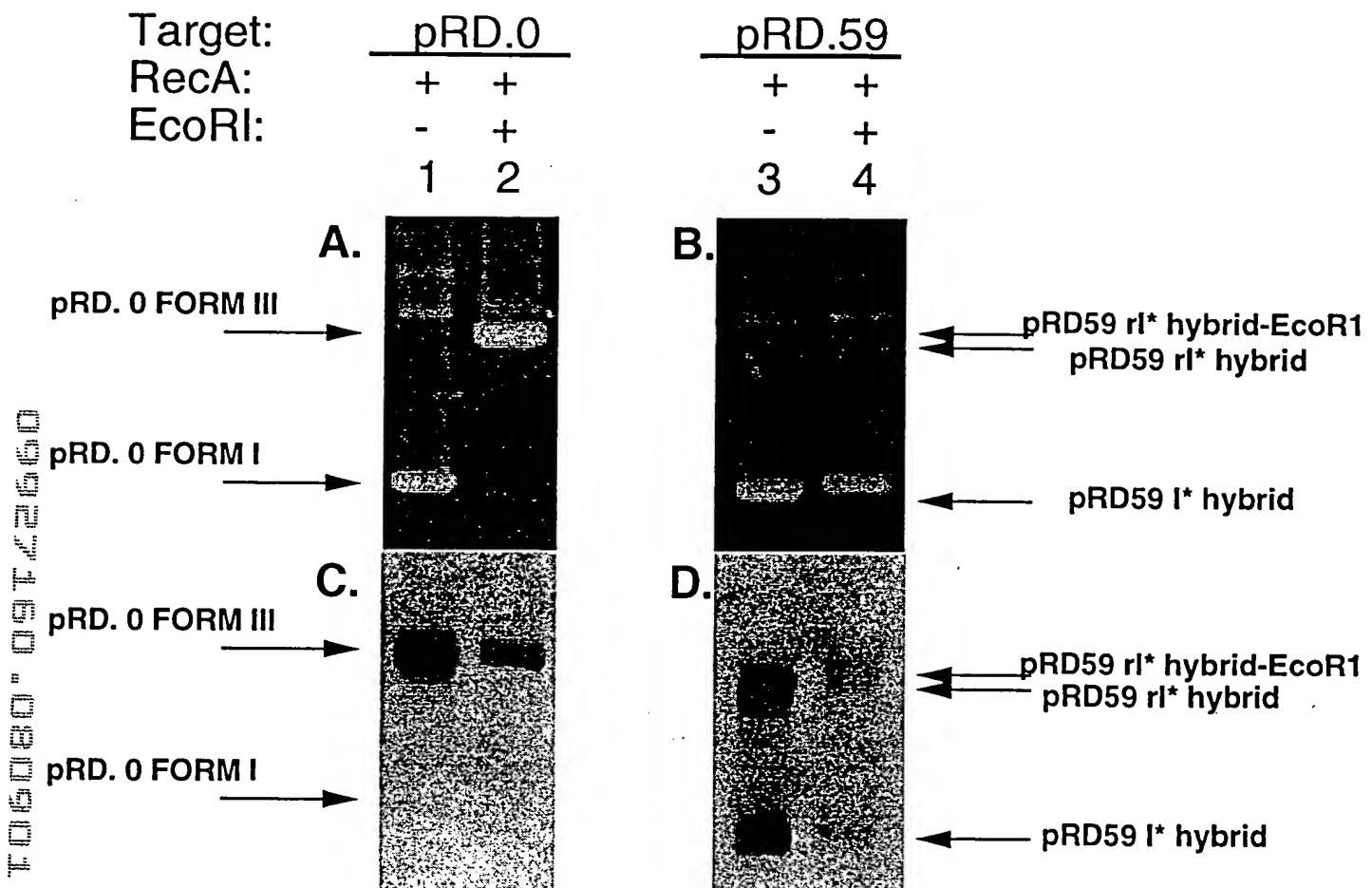
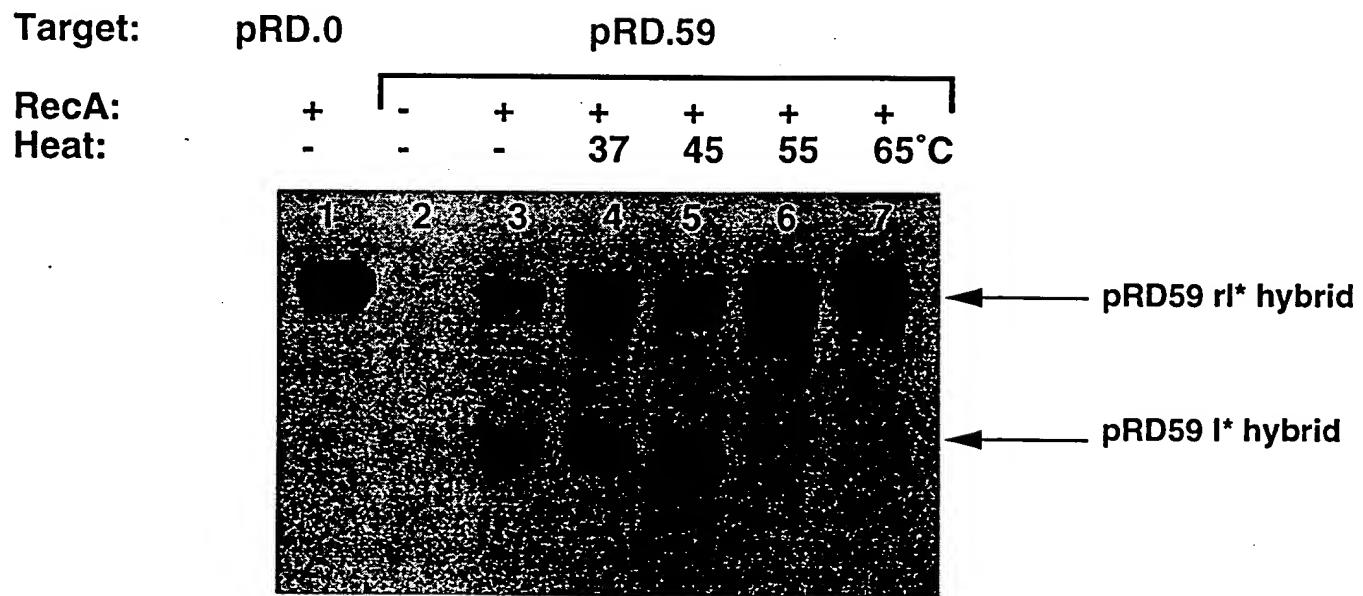
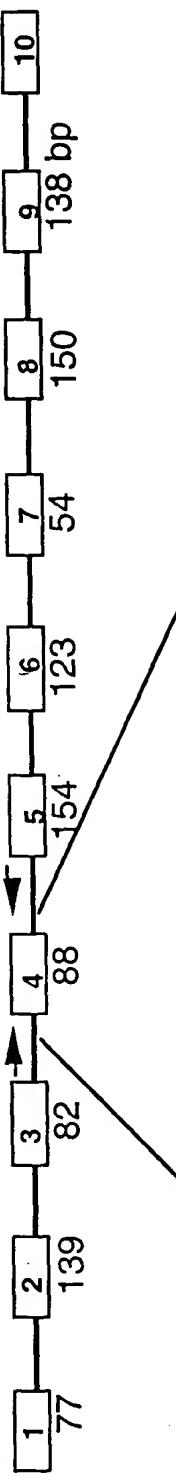


Figure 19



Mouse Ornithine Transcarbamylase Gene

Figure 20A



Exon 4

MIV-MV8: SP230 cSSDNA probe

Figure 20B

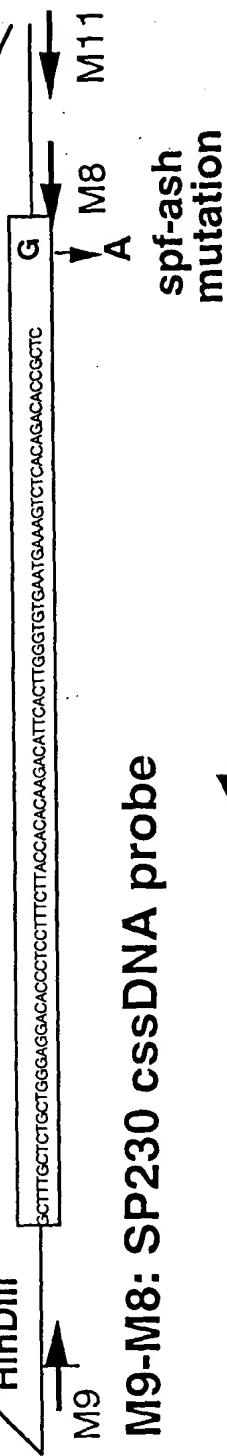
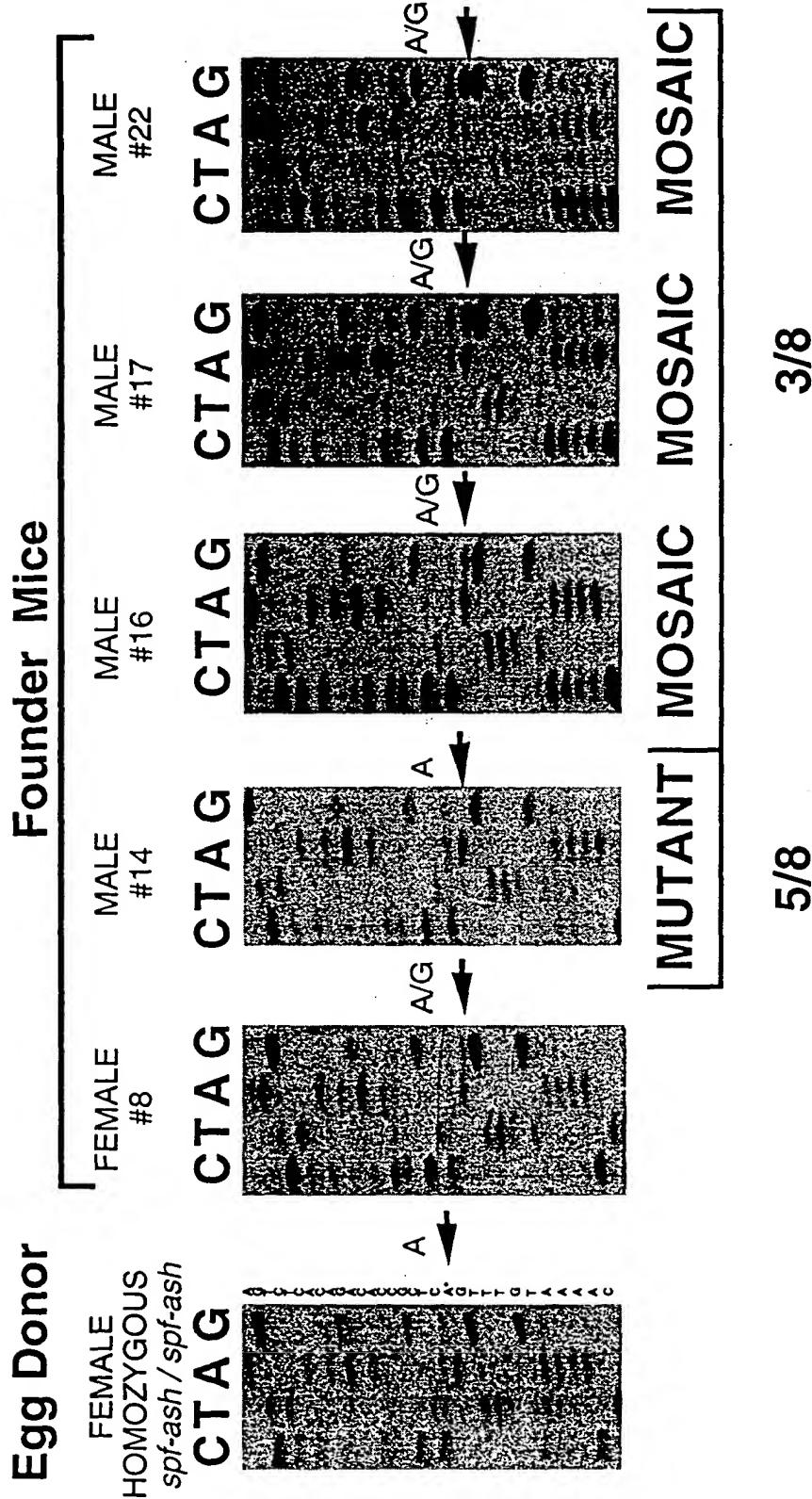


Figure 21 OTC exon4 DNA sequence determination



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Figure 22 Germline Transmission of EHR Corrected OTC⁺ Allele

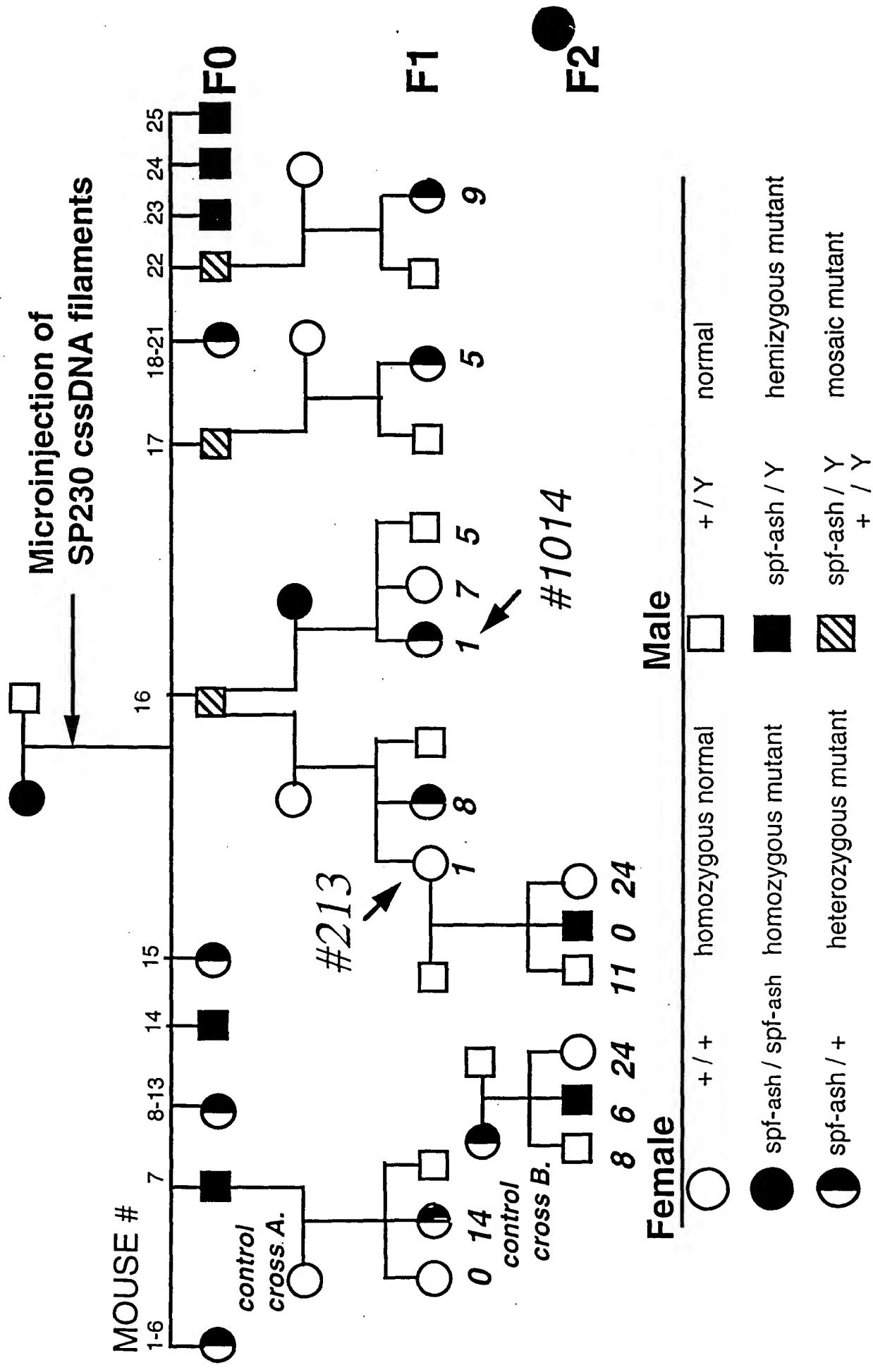


Figure 23

Germline Transmission of Corrected Allele of F0 Male #16

